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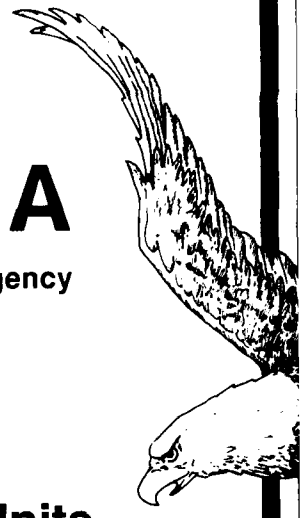

USATHAMA

U.S. Army Toxic and Hazardous Materials Agency

Enhanced Preliminary Assessment Report:

New Britain Army Housing Units New Britain, Connecticut

October 1989

prepared for

Commander
U.S. Army Toxic and Hazardous Materials Agency
Aberdeen Proving Ground, Maryland 21010-5401

prepared by

Environmental Research Division
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Argonne National Laboratory has conducted an enhanced preliminary assessment of the Army housing property located in New Britain, CT. The objectives of this assessment include identifying and characterizing all environmentally significant operations, identifying areas of environmental contamination that may require immediate remedial actions, identifying other actions which may be necessary to resolve all identified environmental problems, and identifying other environmental concerns that may present impediments to the expeditious sale of this property.

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SUMMARY

The New Britain housing facility located in New Britain, Conn., does not represent an imminent or substantial threat to human health or the environment. There is no evidence to suggest that hazardous or toxic constituents have ever been released from this property. No immediate remedial actions are warranted for the site. Nevertheless, environmental impacts from this property have been identified and some remedial actions are warranted.

Although these housing units were originally developed in support of a Nike missile battery, all available documentation and circumstantial evidence suggest that the housing property was wholly independent of the battery's operational activities. No wastes associated with the operation and maintenance of the missile and tracking systems have ever been delivered to or managed at this housing property. Furthermore, this housing property existed independently of the missile launcher area and integrated fire control portions of the battery with respect to water, sewer, or electrical utilities.

Approximately two years ago, the New York District of the Army Corps of Engineers replaced the original underground fuel storage tanks with 275-gallon above-ground tanks. The underground storage tanks remain buried at the rear of the houses and are said to be filled with sand and capped. No integrity or leak tests have ever been conducted for these tanks, nor are there any documented or suspected releases.

Standard materials used in the construction of these housing units included asbestos-containing floor tiles and siding. Both were found to be in good condition. There is no evidence that asbestos is a problem.

Electrical transformers located on the property are maintained by New Britain's power company and there is no evidence that polychlorinated biphenyl (PCB) contamination is a problem.

Finally, it was found during the site visit that a common practice was to leave the spigots to the cement containment troughs around the above-ground tanks in the open position. This was to allow drainage of accumulated rainwater from the troughs. If a spill were to occur, this practice would compromise the effectiveness of the spill-containment trough. These above-ground tanks had only a primer paint covering at the time of installation. This does not provide adequate protection against adverse weather conditions over an extended period of time.

The following actions are recommended prior to release of this property:

- Coat the existing above-ground tanks with a protective paint to insure extended wear integrity of these tanks.

- Develop and implement a solution to the possibility of containment-box drainage taps being inadvertently left in the open position.

These recommendations assume that the property will most likely continue to be used for residential housing.

1 INTRODUCTION

In October 1988, Congress passed the Defense Authorization Amendments and Base Closure and Realignment Act, Public Law 100-526. This legislation provided the framework for making decisions about military base closures and realignments. The overall objective of the legislation is to close and realign bases so as to maximize savings without impairing the Army's overall military mission. In December 1988, the Defense Secretary's ad hoc Commission on Base Realignment and Closure issued its final report nominating candidate installations. The Commission's recommendations, subsequently approved by Congress, affect 111 Army installations, of which 81 are to be closed. Among the affected installations are 53 military housing areas, including the New Britain housing area addressed in this preliminary assessment.[1]

Legislative directives require that all base closures and realignments be performed in accordance with applicable provisions of the National Environmental Policy Act (NEPA). As a result, NEPA documentation is being prepared for all properties scheduled to be closed or realigned. The newly formed Base Closure Division of the U.S. Army Toxic and Hazardous Materials Agency is responsible for supervising the preliminary assessment effort for all affected properties. These USATHAMA assessments will subsequently be incorporated into the NEPA documentation being prepared for the properties.

This document is a report of the enhanced preliminary assessment (PA) conducted by Argonne National Laboratory (ANL) at the stand-alone Army housing area in New Britain, Conn.

1.1 AUTHORITY FOR THE PA

The USATHAMA has engaged ANL to support the Base Closure Program by assessing the environmental quality of the installations proposed for closure or realignment. Preliminary assessments are being conducted under the authority of the Defense Department's Installation Restoration Program (IRP); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 91-510, also known as Superfund; the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499; and the Defense Authorization Amendments and Base Closure and Realignment Act of 1988, Public Law 100-526.

In conducting preliminary assessments, ANL has followed the methodologies and procedures outlined in Phase I of the IRP. Consequently, this PA addresses all documented or suspected incidents of actual or potential release of hazardous or toxic constituents to the environment.

In addition, this PA is "enhanced" to cover topics not normally addressed in a Phase I preliminary assessment. Specifically, this assessment considers and evaluates the following topical areas and issues:

- Status with respect to regulatory compliance,
- Asbestos,
- Polychlorinated biphenyls (PCBs),
- Radon hazards (to be assessed and reported on independently),
- Underground storage tanks,
- Current or potential restraints on facility utilization,
- Environmental issues requiring resolution,
- Health-risk perspectives associated with residential land use, and
- Other environmental concerns that might present impediments to the expeditious "excessing," or transfer and/or release, of federally owned property.

1.2 OBJECTIVES

This enhanced PA is based on existing information from Army housing records of initial property acquisition, initial construction, and major renovations and remodeling performed by local contractors or by the Army Corps of Engineers. The PA effort does not include the generation of new data. The objectives of the PA include:

- Identifying and characterizing all environmentally significant operations (ESOs),
- Identifying property areas or ESOs that may require a site investigation,
- Identifying ESOs or areas of environmental contamination that may require immediate remedial action,
- Identifying other actions that may be necessary to address and resolve all identified environmental problems, and
- Identifying other environmental concerns that may present impediments to the expeditious transfer of this property.

1.3 PROCEDURES

The PA began with a review of Army Housing records located at Fort Devens, Mass., during the week of May 15-19, 1989. Additional information was obtained from conversations with personnel from the Connecticut Housing Office in New Haven, Conn., on July 17. A site visit was conducted at New Britain, Conn., on July 19, 1989, at which time additional information was obtained through personal observations of ANL investigators. Photographs were taken of the housing units and surrounding properties as a means of documenting the condition of the housing units and immediate land uses. Site photographs are appended.

All available information was evaluated with respect to actual or potential releases to air, soil, and surface and ground waters.

Access to individual housing units during the site visit was not possible. However, ANL investigators revisited the property on September 12, 1989, at which time the interiors of all but three of the units (units #28 and 35, Kulper Road; and unit #17, Halsey Street) were inspected.

2 PROPERTY CHARACTERIZATION

2.1 GENERAL PROPERTY INFORMATION

The New Britain housing units are located in central Connecticut, in the city of New Britain, County of Hartford. Land uses around the housing units are generally residential in nature. Figures 1 and 2 show the general location of the facility. The housing units were developed in 1959.

2.2 DESCRIPTION OF FACILITY

Figure 3 presents the site plan of the housing property.

Housing Units

The New Britain housing area consists of 16 "Capehart"-style houses, each having three bedrooms. Capehart is the model name assigned to these houses by the builder, National Homes. The houses are built on concrete slabs with no structures underground. Water lines are imbedded into the foundation slab as were the original heating ducts. Heating ducts and air conditioning ducts were moved to the ceiling approximately two years ago when the Army Corps renovated the heating system. The original ducts were abandoned in place.

Utilities

Since development of the property, the housing units have received city water, and no drinking water wells exist on the property. The property is connected to city power, and all telephone poles and electrical transformers on-site are the responsibility of New Britain's power company. No evidence of spills or leaks from the transformers was observed.

Sewage

The housing units are connected to city sewers.

Fuel Storage

The original 275-gallon underground fuel storage tanks installed in 1959 were replaced approximately two years ago with 275-gallon above-ground tanks. The New York District Army Corps of Engineers conducted the tank renovations and abandoned the original tanks in place, filling them with sand. These are located at the rear of each housing unit. No problems were observed with the above-ground tanks.

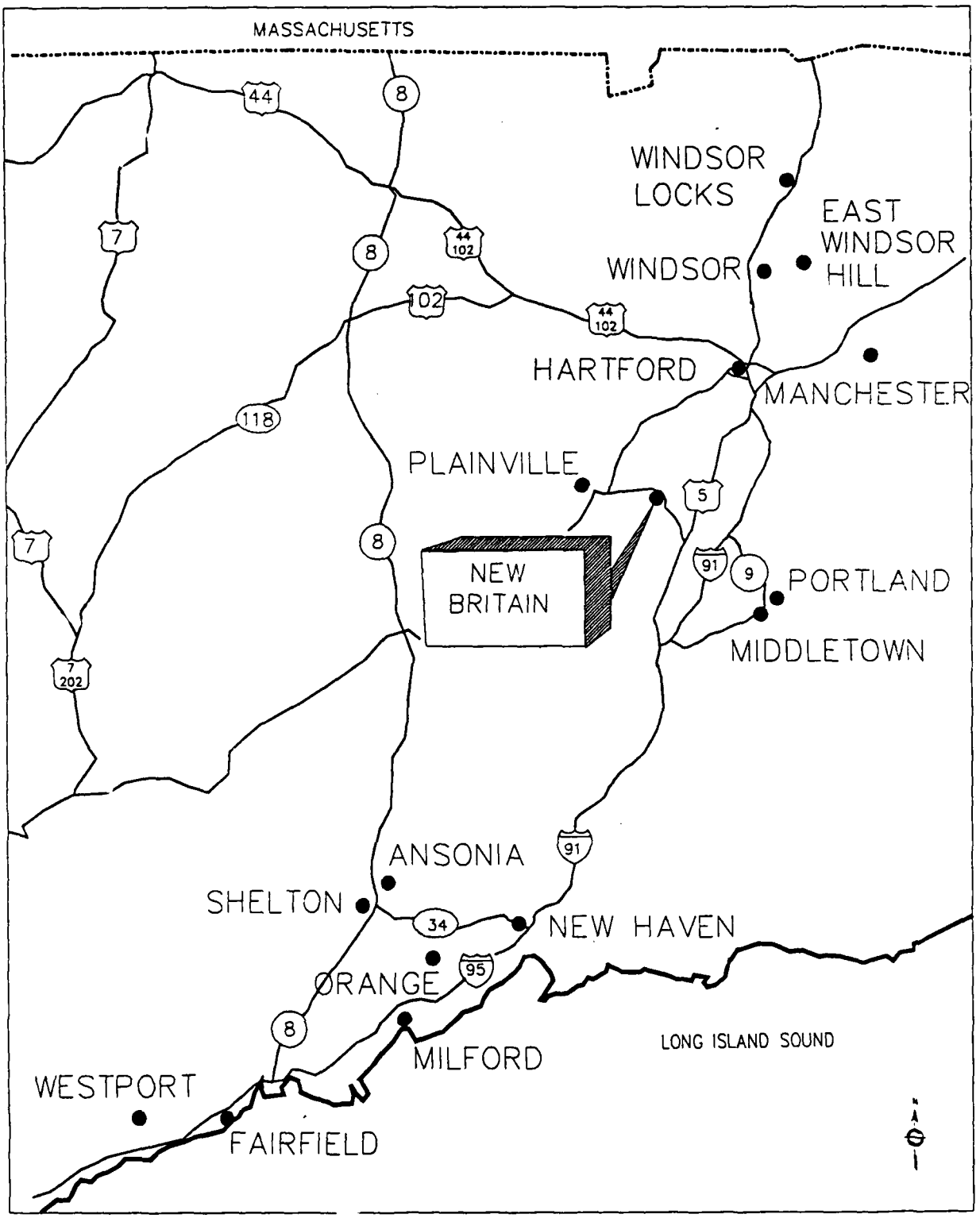


FIGURE 1 Location Map of Connecticut Army Housing Facilities

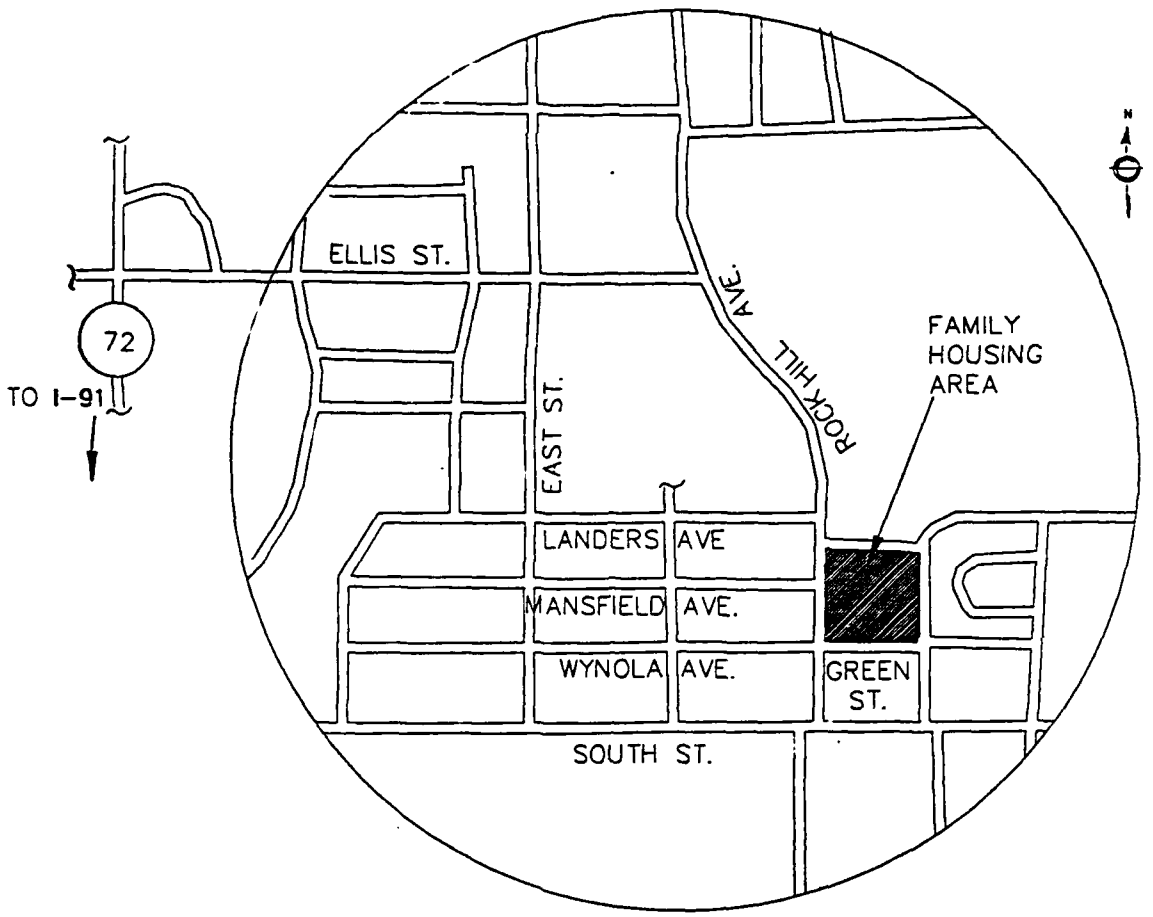


FIGURE 2 Vicinity Map of New Britain Army Housing Units

Storm Drainage Systems

The housing units are connected to city storm drainage.

Other Permanent Structures or Property Improvements

There are no other permanent structures or improvements.

2.3 PROPERTY HISTORY

2.3.1 Nike Defense Program and Typical Battery-Level Practices

Generic information on the national Nike antiaircraft defense program has been compiled in two studies, one commissioned by the Army Corps of Engineers[2] and the other by the U.S. Army Toxic and Hazardous Materials Agency.[3] In both studies, independent contractors relied on information contained in unclassified documents

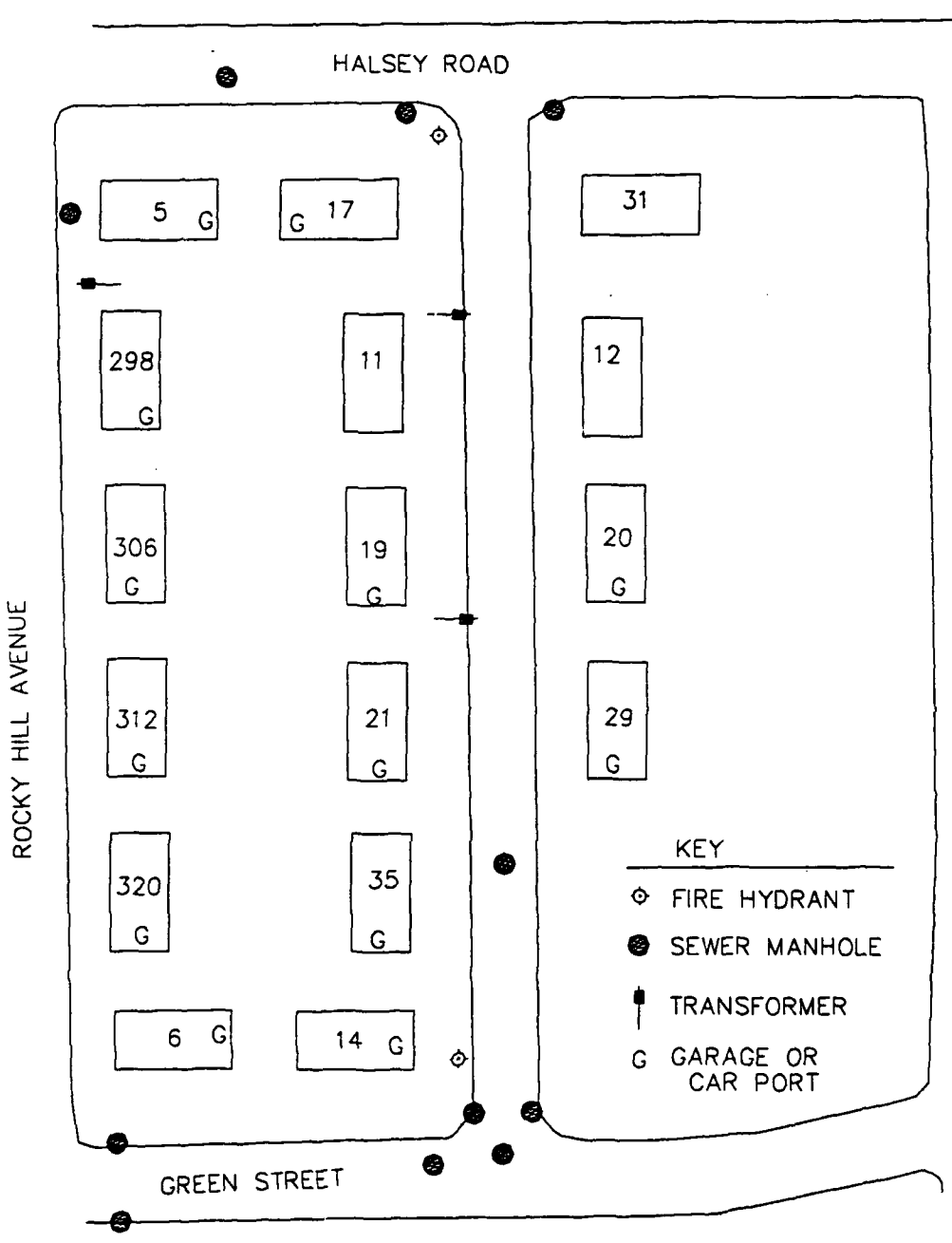


FIGURE 3 Site Plan Map of New Britain Army Housing Units

related to the Nike surface-to-air missile program, including engineering drawings and specifications (for the facilities and the missiles themselves), interviews with Army personnel participating in the Nike program, and operations manuals and directives relating to the operations and maintenance of Nike facilities. Taken together, these two reports represent the most complete assemblage of generic information on the Nike missile program from an environmental perspective. Salient points from both reports are condensed below.

At its zenith in the early 1960s, the Nike program included 291 batteries located throughout the continental United States. The program was completely phased out by 1976, with many of the properties sold to private concerns or excessed to state or local governments for nominal fees.

Nike Ajax missiles were first deployed in 1954 at installations throughout the continental United States, replacing, or in some cases augmenting, conventional artillery batteries and providing protection from aerial attack for strategic resources and population centers. Typically, Nike batteries were located in rural areas encircling the protected area. The Ajax was a two-stage missile using a solid-fuel booster rocket and a liquid-fuel sustainer motor to deliver a warhead to airborne targets.

The Ajax missile was gradually replaced by the Nike Hercules missile, introduced in 1958. Like the Ajax, the Hercules was a two-stage missile, but it differed from the Ajax in that its second stage was a solid-fuel rather than liquid-fuel power source and its payload often was a nuclear rather than conventional warhead. Ajax-to-Hercules conversions occurred between 1958 and 1961 and required little change in existing Nike battery facilities. A third-generation missile, the Zeus, was phased out during development and consequently was never deployed.

A typical Nike missile battery consisted of two distinct and separate operating units, the launch operations and the integrated fire control (IFC) operations. The two operating areas were separated by distances of less than two miles, with lines of sight between them for communications purposes. A third separate area was also sometimes part of the battery. This area was typically equidistant from the two battery operating sites and contained housing for married personnel assigned to the battery. Occasionally, these housing areas also contained battalion headquarters, which were responsible for a number of Nike batteries.

Depending on area characteristics and convenience, the housing areas were often reliant on the launch or IFC sites for utilities such as potable water, electrical power, and sewage treatment. In those instances, buried utility lines connected the housing area to one or both of the other battery properties. It is also possible, however, that housing areas were completely independent of the missile launcher and tracking operations. In those instances, the necessary utilities were either maintained on the housing site or purchased from the local community. In many localities, as the character of the land area around the housing units changed from rural to suburban or urban, communities extended utility services to the housing unit locations, in which case conversions from independent systems to community systems were made.

A large variety of wastes was associated with the operation and maintenance of Nike missile batteries. Normally encountered wastes included benzene, carbon tetrachloride, chromium and lead (contained in paints and protective coatings), petroleum hydrocarbons, perchloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and trichloroethylene. Because of the rural locations of these batteries, and also because very few regulatory controls existed at that time, most of these wastes were managed "on-site." (Unused rocket propellants and explosives, however, would always have been returned to central supply depots and not disposed of on-site.) It is further conceivable that wastes generated at one of the Nike properties may have been transferred to its companion property for management or disposal.

Wastes related to missile operation and maintenance would not have been purposely transferred from a battery operating area to a housing area with no facilities for waste management or disposal. In some instances, however, the sewage treatment facilities for all Nike battery properties were located at the housing area; that possibility cannot be automatically ignored. Finally, where housing areas received various utilities from either of the operating areas, it is also possible that wastes disposed of on those other properties may have migrated to the housing area via the buried utility lines. And since decommissioning of the Nike batteries did not normally involve removal of buried utility or communication lines, any such contaminant migration is likely to have gone unnoticed.

2.3.2 New Britain Housing Units

The New Britain housing area was first built in 1959 as a stand-alone housing facility. Sixteen single-family houses were erected on the property. The 16 houses are situated within an area of private homes and are not segregated from the surrounding community as is sometimes the case with such housing units. Since Nike battery decommissioning in the early 1970s, these units have been used to house active duty military personnel and their dependents.

No other permanent structures have been added since the initial property development in 1959. Underground fuel storage tanks were replaced in 1987 with above-ground tanks. However, there were no problems or suspicions of leaks from the original tanks. Instead, this changeover was the result of good engineering practice.

2.4 ENVIRONMENTAL SETTING AND SURROUNDING LAND USE

The surrounding land is a residential area and is relatively flat. The entire property is 3.71 acres with surrounding woodland on its borders.[4] The city of New Britain has a 1984 population estimate of 74,000.[5]

2.5 GEOLOGIC AND HYDROLOGIC SETTINGS

New Britain is located in the Upper Connecticut River Basin of the New England Upland Section of the New England Physiographic Province. The 508 square miles of the

upper Connecticut River Basin in north-central Connecticut include the basins of four major tributaries: the Scantic, Park, and Hockanum rivers; and the Farmington River downstream from Tariffville. Precipitation over this area averaged 44 inches per year during 1931 to 1960. In this period, an additional 3,800 billion gallons of water per year entered the basin in the main stem of the Connecticut River at the Massachusetts state line; about 230 billion gallons per year entered in the Farmington River at Tariffville; and about 10 billion gallons per year entered in the Scantic River at the Massachusetts state line. Some water was also imported from outside the basin by water-supply systems. About half of the precipitation, 22.2 inches, was lost from the basin by evapotranspiration; the remainder flowed out of the area in the Connecticut River at Portland. There are 30 principal lakes, ponds, and reservoirs in the Upper Connecticut River Basin. Two of these bodies of water have usable storage capacities of more than 1 billion gallons. Floods have occurred each month of the year. The greatest known flood on the Connecticut River was in March 1936; it had a peak flow of 130,000 cubic feet per second at Hartford. Since then, major floods have been reduced by flood-control measures.[6]

The major aquifers underlying the basin are composed of unconsolidated materials (stratified drift and till) and bedrock. Stratified drift overlies till and bedrock in valleys and lowlands in the eastern and western parts, and in most of the broad central valley. The stratified drift generally ranges in thickness from 10 feet in small valleys to more than 200 feet in the Connecticut River Valley. Bedrock underlies the entire basin and is composed of (1) interbedded sedimentary and igneous rocks, and (2) crystalline rocks.

Groundwater sources yield from several million gallons per day from large well fields to 1 gallon per minute (gal/min) from single wells. Yields of 100 gal/min or more are most commonly obtained from screened wells tapping stratified-drift aquifers. Small to moderate water supplies can generally be obtained from any of the aquifers. Wells in bedrock yield at least a few gallons per minute at most sites. The probability of obtaining an adequate yield for domestic supply is greater in sedimentary than in crystalline bedrock, and is also greater in stratified-drift overburden than in till.

Where unaffected by man's activities, the water is of the calcium magnesium bicarbonate type; is generally low to moderate in dissolved-solids concentration; and ranges from soft to hard. In general, stream flow is less mineralized than groundwater, particularly when it consists largely of direct runoff. However, streams become more highly mineralized during low-flow conditions, when most flow consists of more highly mineralized water discharged from aquifers. The median dissolved-solids concentration in water from 25 stream sites was 113 milligrams per liter (mg/L) during high flow, and 148 mg/L during low flow. Iron and manganese occur naturally in objectionable concentrations in some streams draining swamps, and in some waters draining from sedimentary bedrock that contains iron- and manganese-bearing minerals.

Man's activities have affected the water quality of streams in much of the area, particularly in the Hockanum and Park River basins. The degradation of quality in these streams is shown by wide and erratic changes in dissolved-solids concentration, excessive amounts of trace elements, a low dissolved-oxygen content, and abnormally high temperatures. Groundwater within this area is degraded principally by induced

infiltration of surface water that contains chemical wastes; by leachate from wastes stored or disposed of on the ground; and by effluents discharged from septic tanks.[6]

The quantity and quality of water are satisfactory for a wide variety of uses, and with suitable treatment the water may be used for most purposes. The total amount of water used in 1968 was more than 100 billion gallons. About 80% of this was used for industrial purposes, and 90% of the industrial water was obtained from surface-water sources. About 85% of the population was supplied with water for domestic use by 15 major public and municipal systems and 25 private associations. Analyses of water from the 13 largest systems show that it is generally high quality.

3 ENVIRONMENTALLY SIGNIFICANT OPERATIONS

3.1 UNDERGROUND STORAGE TANKS

Each unit has a 275-gallon underground fuel tank in back of the house. These tanks are no longer in use. The New York District Army Corps of Engineers drained and filled these tanks with inert material and had them capped-off in 1987. Above-ground fuel storage tanks with a capacity of 275 gallons are currently in use behind each house. No documentation was found to indicate failures or suspected leaks in any of these tanks. Given the advanced ages of the tanks, their replacement was the result of good engineering practice.

3.2 ASBESTOS CONSTRUCTION MATERIALS

Asbestos-containing floor tiles are believed to have been used in original construction. However, all such materials were found to be in good condition.

3.3 ABOVE-GROUND TANKS

The above-ground tanks have only a primer paint to cover them, and a make-shift shelter attached to the house a few feet above the tanks. This does not offer adequate protection to the tanks against adverse weather conditions. Areas of rust and corrosion were observed on some of the tanks.

It is common practice for the residents of the housing area to leave the spigots open which drain the cement troughs around the above-ground tanks. This is to allow the rainwater which collects in these tanks to drain away. Residents store garbage cans, lawn chairs, and miscellaneous supplies in this trough area. If these spigots are left open routinely, the effectiveness of the cement troughs as spill-containment devices would be compromised. No such incident has occurred, however.

4 KNOWN AND SUSPECTED RELEASES

No major releases or impacts to the environment have been identified for the New Britain housing property. No hazardous wastes or hazardous materials are stored on-site. The housing property has been residential in character since its original construction, and no industrial activities are known to have occurred on this property.

5 PRELIMINARY ASSESSMENT CONCLUSIONS

Although these housing units were originally developed in support of a Nike missile battery, all available documentation and circumstantial evidence indicate the fully independent operation of this housing property from other Nike battery activities. No Nike-related wastes were delivered to this property for management or disposal. Furthermore, since this property was independent of the Nike missile operations with respect to all necessary utilities, there is no possibility of migration of Nike-related wastes along buried utility lines.

Floor tiles, which may contain asbestos, were found to be in good condition.

No records indicate a problem with PCB-related contamination at this site. The local power company maintains the electrical transformers, and no evidence of spills or leaks from these transformers was found.

The original underground heating oil tanks installed at each unit are no longer in service, but have not been removed. No records were found indicating that any leak tests or soil tests have been conducted around these tanks. None of these tanks is believed to have cathodic protection or other protective coatings. Furthermore, the topography of the property frequently results in saturated soil conditions which may have promoted corrosion of the tanks. No leaks or releases were found or suspected, however, and the method used to abandon the tanks is generally considered acceptable.

Although the above-ground tanks were installed with a cement containment trough around them, the effectiveness of containing a possible oil spill is compromised with the common practice of leaving the spigots to the troughs left in the open position. These tanks were installed with only a primer paint coating, which does not allow adequate protection from adverse weather conditions over an extended period of time. Some corrosion was observed.

6 RECOMMENDATIONS

The New Britain housing area does not represent an imminent or substantial threat to human health or the environment. There is no evidence to suggest that hazardous or toxic constituents have ever been released from this property. No immediate remedial actions are warranted for this site.

One potential environmental impact derives from the continued use of the inadequately protected above-ground fuel-oil storage tanks and their associated concrete containment boxes. The integrity of these relatively new storage tanks should be confirmed, and following treatment for existing rust, protective coatings should be applied to the exteriors of the tanks. With respect to containment-box drainage taps, a method should be devised to ensure that they do not remain in the open position for extended periods of time.

REFERENCES

1. *Base Realignments and Closures*, Report of the Secretary's Commission (Dec. 1988).

2. U.S. Army Corps of Engineers, Huntsville Div., *Investigation of Former Nike Missile Sites for Potential Toxic and Hazardous Waste Contamination*, Law Engineering and Testing Co., LEG-Government Services Division, LEG Job #601 (March 1986).

3. U.S. Army Toxic and Hazardous Materials Agency, *Historical Overview of the Nike Missile System*, prepared by B.N. McMaster et al., Environmental Science and Engineering, Inc., for USATHAMA Assessments Div., Aberdeen Proving Ground, Md. (Dec. 1984).

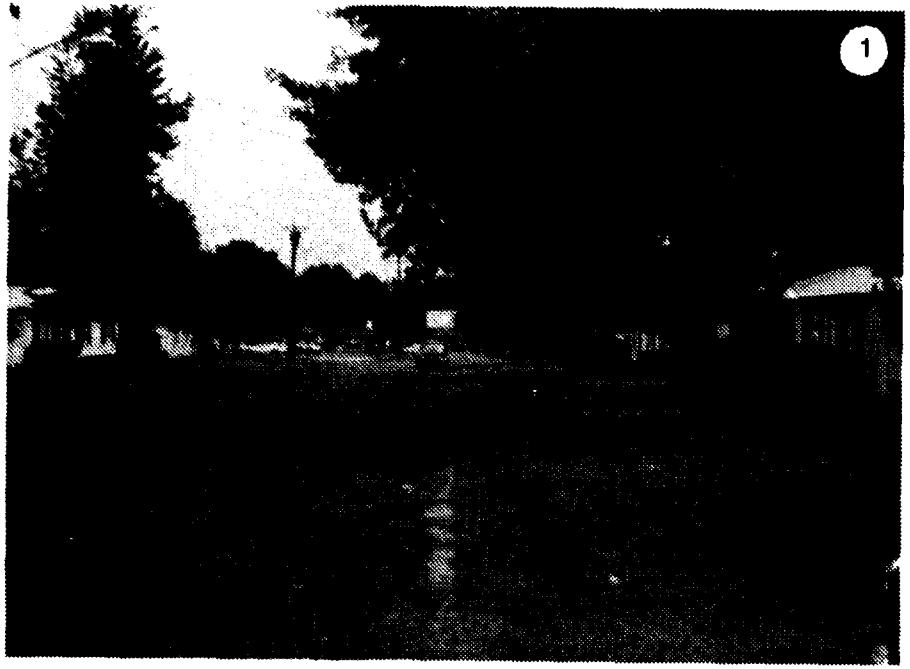
4. *Report of Excess*, Directorate of Engineering and Housing (May 10, 1985).

5. *The Municipal Year Book 1988*, Vol. 55, prepared by the International City Management Association, Washington, D.C. (1988).

6. Ryder, R.B., M.P. Thomas, and L.A. Weiss, *Water Resource Inventory of Connecticut*, Part 7, Upper Connecticut River Basin, Connecticut Water Resources Bulletin No. 24 (1981).

APPENDIX:

PHOTOGRAPHS OF NEW BRITAIN HOUSING FACILITY AND SURROUNDING LAND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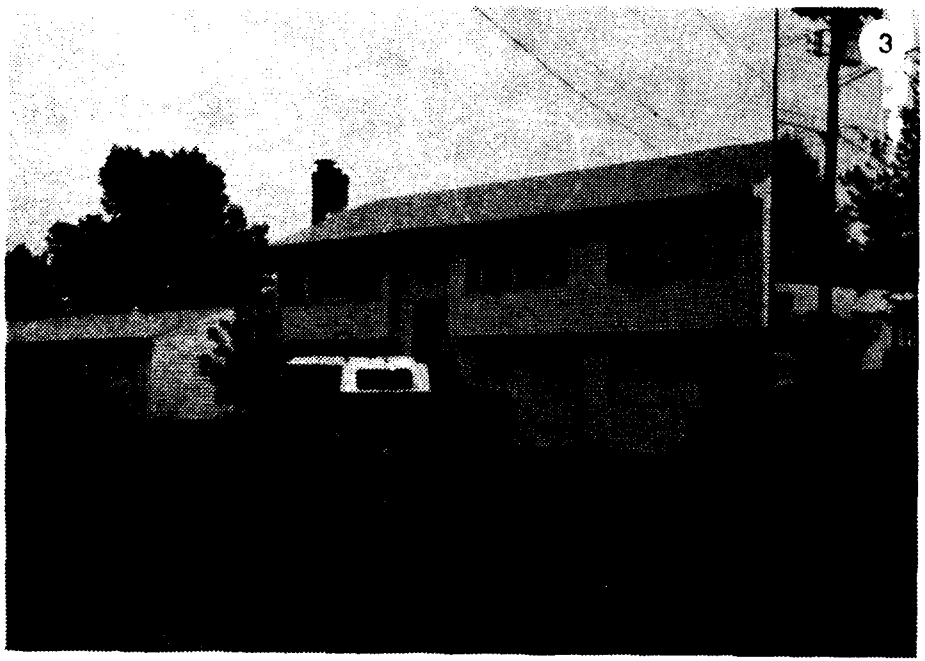
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IDENTIFICATIONS OF PHOTOGRAPHS

1. A view along Kulper Road toward Halsey Road in the distance; the electrical transformer atop the utility pole is located in front of unit #11; transformers are the responsibility of the New Britain Power Company.

2. Above-ground fuel tank in its concrete containment box at rear of unit #14, on Green Street; end seam of the tank shows considerable rusting.

3. Private residence next door to unit #28, on Kulper Road; similar private residences surround the housing area; partially framed on the right is an electrical transformer atop a utility pole, which is in front of unit #19 on Kulper Road; transformers at this site are owned by the New Britain Power Company.